

REMARKS

According to the foregoing, claims 1-2, 4-5, 9, 11-14, 16-17, 21 and 22 are amended and new claims 24 and 25 are added; thus, the pending claims 1-25 remain for reconsideration, which is respectfully requested.

No new matter has been added and accordingly, entry and approval of amended claims 1-2, 4-5, 9, 11-14, 16-17, 21 and 22 is respectfully requested.

STATUS OF THE CLAIMS:

Claims 1-25 are pending.

Claims 1-23 are rejected.

ITEMS 1-2: REJECTION OF CLAIMS 1, 3, 5, 7-9, 12-13, 16-18 AND 20-21 UNDER 35 U.S.C. §102(e) AS BEING ANTICIPATED BY ROSENBERG ET AL., U.S. PATENT NO. 6,429,846, HEREINAFTER REFERRED TO AS "ROSENBERG"

This rejection is respectfully traversed.

Rosenberg discloses, at column 1, lines 56-62, that the purpose of Rosenberg is to provide users with haptic feedback. To accomplish haptic feedback, as illustrated in FIG. 4, FIG. 5, and FIG. 6 of Rosenberg, elements 42, 64, elements 52, 62, and elements 54, and 64 respectively are used.

The Office Action, at item 2, lines 4-5, asserts that the voice coil actuator 54 in FIG. 5 of Rosenberg corresponds to a combination of the "current conducting element" and the "magnetic field application unit" in claim 1 of the present application.

However, as described in "BACKGROUND OF THE INVENTION" of the present application, "In order for the operator to recognize the operation of pressing the touch panel or pad with the pen or fingers, it has been proposed to make the touch panel vibrate". That is, the technique of providing users with haptic feedback is known. The purpose of the present application is, while employing the vibration technique, to make the input device thin and achieve a sufficiently large vibration amplitude. See, for example, page 1, line 6 to page 2, line 26 of the Specification regarding voltage levels, configurations and image quality.

The examiner does not present grounds for why the voice coil actuator 54 in FIG. 5 of Rosenberg corresponds to a combination of the "current conducting element" and the "magnetic field application unit" in claim 1 of the present application. Applicants assume that the Examiner equates the "coil" of Rosenberg with the claimed "current conducting element" and the "magnet"

of Rosenberg with the claimed “magnetic field application unit.” However, Applicants respectfully disagree with the Examiner’s assertion.

Rosenberg discloses, at column 8, line 61 to column 9, line 1:

An actuator 54 is also coupled to the touchpad 16 to impart forces on the touchpad and cause the touchpad 16 to move along the z-axis. In the present embodiment, actuator 54 is a linear voice coil actuator, where the moving portion (bobbin) of the actuator is directly coupled to the touchpad 16. The actuator 54 is grounded to the computer 10 housing and outputs a linear force on the touchpad 16 and thus drives the touchpad along the z-axis.

Rosenberg further discloses, at column 9, lines 40-44:

The voice coil actuator 54 preferably includes a coil and a magnet, where a current is flowed through the coil and interacts with the magnetic field of the magnet to cause a force on the moving portion of the actuator (the coil or the magnet, depending on the implementation.)...

In other words, Rosenberg discloses an “actuator” coupled to the screen to vibrate the screen. The “actuator” is a coil of wire surrounding a magnet so that when electricity passes through the coil, the coil creates a magnetic field which interacts with the magnetic field of the magnet to create the vibrations. Rosenberg further discloses that either the coil or the magnet can be the part of the actuator coupled to the screen. Therefore, Rosenberg discusses a coil and a magnet attached underneath the screen (see Rosenberg Figs. 5 and 6). The magnet creates a magnetic field **perpendicular** to the screen causing either the coil or the magnet, whichever is coupled to the screen, to move, which vibrates the screen. In contrast, the claimed embodiment recites “a current conducting element for conducting a driving current when the input panel is touched, **said current conducting element being arranged in a region corresponding to a peripheral region of the input panel**; and a magnetic field application unit configured to apply a magnetic field to the current conducting element, **the magnetic field application unit being arranged in the region corresponding to the peripheral region of the input panel**, wherein the magnetic field intersects the current conducting element, and a portion of the magnetic field that intersects the current conducting element **is parallel to the input panel**” as recited, for example, in claim 1.

One benefit of the claimed embodiment is that it does not require an actuator or a piezoelectric element to be positioned beneath the screen to vibrate the screen, therefore the input device can be thinner while still producing a sufficiently large vibration amplitude. See, for example, page 2, lines 14-18 of the Specification, which recites:

In the device of the related art in which an actuator including coils and magnets is arranged below the touch pad, it is difficult to make the device thin because of the existence of the actuator below the pad.

Furthermore, the Office Action fails to address the claimed “a portion of the magnetic field that intersects the current conducting element **is parallel to the input panel**,” as recited in claim 1. MPEP § 2106, recites in part:

Finally, when evaluating the scope of a claim, **every limitation in the claim must be considered**. ... See, e.g., *Diamond v. Diehr*, 450 U.S. 175, 188-89, 209 USPQ 1, 9 (1981) (“In determining the eligibility of respondents’ claimed process for patent protection under § 101, their claims must be considered as a whole...
(emphasis added)

The Office Action fails to address each and every limitation in independent claim 1. Therefore an anticipation rejection cannot be maintained.

Independent claims 12 and 13 patentably distinguish over the cited prior art for similar reasons as independent claim 1.

Dependent claims patentably distinguish at least due to their dependence from the respective independent claims or recite patentably distinguishing features of their own.

For example, claim 3 recites “wherein the current conducting element is a printed pattern formed on the input panel.” As discussed above, Rosenberg discusses a “coil” surrounding a magnet forming an actuator and therefore clearly fails to disclose, either expressly or inherently, the claimed “current conducting element is a printed pattern formed on the input panel.” The Examiner fails to address the limitations of the other dependent claims, therefore, Applicants respectfully submit an anticipation rejection cannot be maintained over dependent claims 3, 5, 7-9, 16-18 and 20-21.

Withdrawal of the rejection of pending claims, and allowance of pending claims is respectfully requested.

ITEMS 3-4: REJECTION OF CLAIMS 2-3, 7, 14 AND 19 UNDER 35 U.S.C. §103(a) AS BEING UNPATENTABLE OVER ROSENBERG IN VIEW OF YOSHIKAWA ET AL., U.S. PATENT PUBLICATION NO. 2003/0067449, HEREINAFTER REFERRED TO AS “YOSHIKAWA”

This rejection is respectfully traversed

Dependent claims 2-3, 7, 14 and 19 patentably distinguish at least due to their dependence from the respective independent claims or recite patentably distinguishing features

of their own. Withdrawal of the rejection of pending claims, and allowance of pending claims is respectfully requested.

ITEM 5: REJECTION OF CLAIMS 10 AND 22 UNDER 35 U.S.C. §103(a) AS BEING UNPATENTABLE OVER ROSENBERG IN VIEW OF HENDERSON ET AL., U.S. PATENT NO. 6,011,545, HEREINAFTER REFERRED TO AS "HENDERSON"

This rejection is respectfully traversed

Dependent claims 10 and 22 patentably distinguish at least due to their dependence from the respective independent claims or recite patentably distinguishing features of their own. Withdrawal of the rejection of pending claims, and allowance of pending claims is respectfully requested.

ITEM 6: REJECTION OF CLAIMS 11 AND 23 UNDER 35 U.S.C. §103(a) AS BEING UNPATENTABLE OVER ROSENBERG IN VIEW OF TAGUCHI ET AL., U.S. PATENT NO. 4,845,478, HEREINAFTER REFERRED TO AS "TAGUCHI"

This rejection is respectfully traversed

Dependent claims 11 and 23 patentably distinguish at least due to their dependence from the respective independent claims or recite patentably distinguishing features of their own. Withdrawal of the rejection of pending claims, and allowance of pending claims is respectfully requested.

NEW CLAIMS 24-25 PATENTABLY DISTINGUISH OVER THE CITED PRIOR ART:

New claim 24 recites:

24. (New) A display screen comprising:
 - a display section displaying images;
 - a touch panel to input data; and
 - a vibrating section between the display section and the touch panel, the vibrating section comprising:
 - a current conducting element conducting current when the touch panel is touched; and
 - a magnetic field applicator applying a magnetic field to the current conducting element causing the vibrating section and touch panel to vibrate when the current conducting element is conducting current.

New claim 24 patentably distinguishes over the cited prior art for similar reasons as independent claims 1, 12 and 13. Support for new claim 24 can be found, for example, in the Specification at page 8, lines 6-13 and in Figs. 3, 10 and 12.

New dependent claim 25 patentably distinguishes at least due to its dependence from the independent claim 25 and for reciting patentably distinguishing features of its own.

CONCLUSION

There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.

Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

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